

itouch

itouch Easy and itouch Plus User's Guide

Includes Setup and
troubleshooting information
for your itouch Easy and Plus
Intelligent TENS



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Contents

The i-touch is supplied complete:

- 1 x i-touch TENS Pain Relief Unit (Easy or Plus)
- 1 x 2 in 1 lead wire for both channels
- 1 x Pack of 4, 50 x 50mm, Self-adhesive Electrode pads
- 2 x AA 1.5v (Type LR6) batteries
- 1 x Instruction Manual
- 1 x Storage Pouch with belt clip

i-touch Accessories

Available from www.tenscare.com

Belt clip for all i-touch units



CE
0473

FDA

Worldwide Distribution.

Operating Instructions

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1. INTRODUCTION

The i-touch Easy and Plus TENS units represent a new and controllable way of delivering better pain relief to the user. The units are for home and professional use.

i-touch EASY features:-

One Touch Memory Start

On start up, at the touch of only ONE button, the i-touch remembers and returns to the last settings. It also gently ramps up to around 75% of the last intensity level used. This takes into account accommodation that the body may have experienced

Comfort Strength Control

Gives a known and reproducible stimulation. CSC monitors skin and electrode pad resistance and adjusts the output to maintain a constant current, which is linked to intensity steps of 0.5mA, allowing for maximum comfort

2 in 1 Lead Connection

Unique single plug connection for both channels which simplifies lead connection and management during use

- 8 Medically proven programmes
- Backlit LCD screen for easy reading
- Sculptured keypad with easy recognition keys, especially beneficial for anybody with limited use of the hands.

i-touch PLUS features:

- All the features of the "EASY" plus the following:
- Customised Settings: Choice of a wide range of settings with the ability to store and remember the selection
- Usage Diary : Facility that remembers how long, what strength and what settings have been used
- 24 Hour Clock
- 3 Daily Alarm Settings: Which can be used as medication reminders

2. CAUTIONS & WARNINGS

Do not use TENS :

- if you have a heart pacemaker or have a heart rhythm problem
- if you have epilepsy
- during the first three months of pregnancy
- when driving or operating machinery
- if you are suffering from acute, feverish or infectious diseases
- to mask or relieve undiagnosed pain.

Do not place electrode pads :

- on the carotid arteries at the front of the neck
- over the eyes
- across the front of the head
- on the abdomen at anytime when pregnant
- near malignant tumours

Do not start your TENS treatment until the cause of pain has been diagnosed.

If you are in any doubt about any of these warnings please consult your medical adviser.

3. SIDE EFFECTS

There are no known side effects from TENS use and long-term TENS use is not harmful.

4. COMPLICATIONS

The following points are worth noting: DO NOT -

- ignore any allergic reaction to the electrode pads: If a skin irritation develops, discontinue use and consult a doctor or medical professional.
- apply electrode pads to broken skin.
- apply electrode pads to skin which does not have normal sensation. If the skin is numb, too great a strength may be used, which could result in a local inflammation.

continued overleaf

5. GENERAL PRECAUTIONS AND ADVICE

Do not -

- immerse your TENS unit in water or place it close to excessive heat or attempt to open up the TENS unit. Such actions will negate the guarantee.
- mix old, new or different types of batteries. Be sure to dispose of old batteries safely.

Do

- remove batteries from your TENS machine if the unit is unlikely to be used for a long period.

6. HOW "TENS" WORKS

TENS stands for Transcutaneous Electrical Nerve Stimulation.

TENS is recommended throughout the world by pain clinics and physiotherapy departments. Not only does TENS reduce your pain, it can also help you to reduce your need for painkillers. TENS is a means of stimulating your body's own natural defences against pain. The electrode pads are usually placed near the source of the pain. TENS sends a very small electric current through the skin which works in two ways:-

Pain Gate

Stimulating the sensory nerves, which carry touch and temperature signals. These nerves go to the same connections in the spine as the nerves carrying pain. A strong sensory signal will block the pain signal travelling up the spine to the brain. This is known as the "Pain Gate".

In the Pain Gate mode TENS only provides relief while it is switched on. The effect may start to wear off after 1-2 hours. You can stop for an hour and then repeat the treatment later. You can use TENS several times a day for as long as you like, provided that you do not have the strength high enough to produce muscle contractions.

Endorphin Release

At low frequency settings, and slightly stronger output, TENS drives the motor nerves to produce a small repetitive muscle contraction. This is seen by the brain as exercise, and this promotes the release of Endorphin - your body's own natural pain killer. The relief builds up and normally takes about 40 minutes to reach a maximum level which can last for hours.

Most people will achieve a reduction in pain. Some find that their pain goes away completely while they are using TENS. Some users only feel better after repeated use, and over a long time period.

7. THE DIFFERENT PROGRAMMES

Each programme has its own combination of Frequency and Pulse Width settings which allow for different sensations through the pads and suppress pain in different ways. The i-touch Plus TENS contains the same 8 preset programmes plus the facility to set customised programmes.

Frequency (measured in Hz - pulses per second)

A frequency of 110 Hz is good at blocking pain signals from reaching the brain. A low frequency of 4 or 10 Hz allows for the release of endorphins, the body's natural morphine-like substances.

Pulse Width (measured in μ S - millionths of a second)

The i-touch TENS units offer a range of pulse widths from 50 to 250 μ S. Depending on the pulse width the feeling through the pads will vary.

Constant and Burst Modes

Constant mode is when the sensation is continuous, as against Burst mode when the sensation is as its name implies, repeatedly on and off.

Modulation Modes

Modulation is when either the frequency or pulse width sweep across a range of settings. This enables the body to receive many different signals and can be very beneficial and lessen any effect of accommodation. See programmes F and G.

Han Stimulation

Professor Han in China found in his research studies, that alternating very low (2Hz) and medium (110Hz) frequency gave best pain relief. See programme H.

Pr	Method	Sensation	Application
A	Med Freq, Low Width Pain Gate	Tingling/Pins and needles sensation. Increase strength slowly until sensation is strong but comfortable.	Most types of acute and chronic pain
B	Low Freq, Med Width, Endorphin	Pulsing or tapping sensation associated with muscle contractions. Increase the strength to a level that just produces muscle activity.	Chronic pains such as back pain & arthritis, but not for injured muscles
C	Burst, Pain Gate and Endorphin	Stimulus is delivered in bursts, i.e. a group of pulses rather than a single pulse. You will get muscle activity at a lower strength and so should find it more comfortable.	Chronic pains such as back pain & arthritis, but not for injured muscles
D	Low Freq, Med Width, Endorphin	Similar to B, but at a Freq specifically recommended for nausea, travel sickness and morning sickness (see body map for position of electrode pads).	Chronic pain, nausea, travel sickness, and morning sickness but not for injured muscles
E	Med Freq, Med Width, Pain Gate	Similar to A, but with deeper penetration and a stronger feel. It is more likely to produce muscle contractions at a lower strength	Most types of acute and chronic pain
F	Med Freq, Med Width, Width Modulation Pain Gate	Similar to E but, with the pulse width modulating continuously, this gives a pleasant slow relaxing massage sensation.	Most types of acute and chronic pain
G	Freq Modulation, Med Width Pain Gate	This constantly modulates the frequency between 20 and 100 Hz over 12secs. The continuous change helps prevent accommodation occurring.	Most types of acute and chronic pain
H	Han Stimulation Low and High Freq. Pain Gate and Endorphin	This gives 3 seconds of tapping, followed by 3 seconds of tingling. The strength is adjusted automaticalkeep the stimulation comfortable as the frequency changes	Chronic pains such as back pain & arthritis, but not for injured muscles

8. WHICH PROGRAMME TO USE

When using the i-touch TENS unit for the first time, you should start with Programme A. Most people find the soft tingling/pins-and-needles sensation produced by this programme the most comfortable. The unit will start in Programme A when first switched on.

The most effective programme varies from one person to another therefore It is important to try the different programmes.

When you have found the programme which suits you best, the i-touch TENS will remember it, and automatically return to it the next time the unit is switched on.

The i-touch units are fitted with intensity regulators that increase and decrease the intensity in 0.5mA steps which allows for a soft and comfortable sensation. Increase the strength slowly until you have a strong but comfortable feeling.

During the treatment the body acclimatises to the feeling through the pads therefore, to keep the sensation constant, increases in intensity will be necessary.

N.B. Chronic Pain is pain that continues or recurs over a prolonged period. Acute Pain is severe pain following an accident, trauma or surgery.

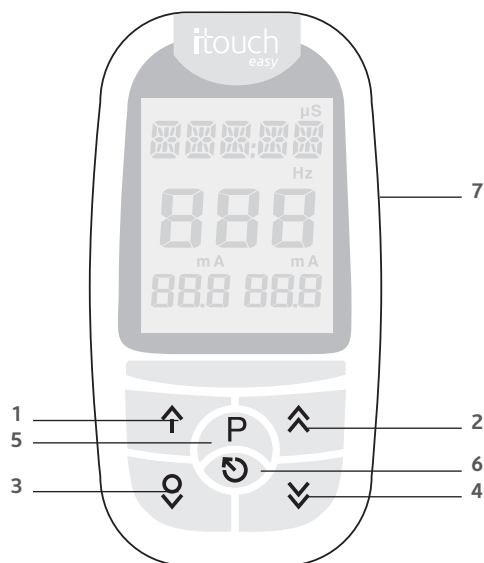
9. WHEN TO USE TENS

TENS can be used for as long as is necessary. Continuous treatment is fine, but electrode pads should be repositioned regularly (at least every 12 hours) to allow the skin to be exposed to the air.

The Endorphin Release modes work better when the strength is high enough to cause small muscle contractions. Best results are achieved at between 20 and 40 minutes.

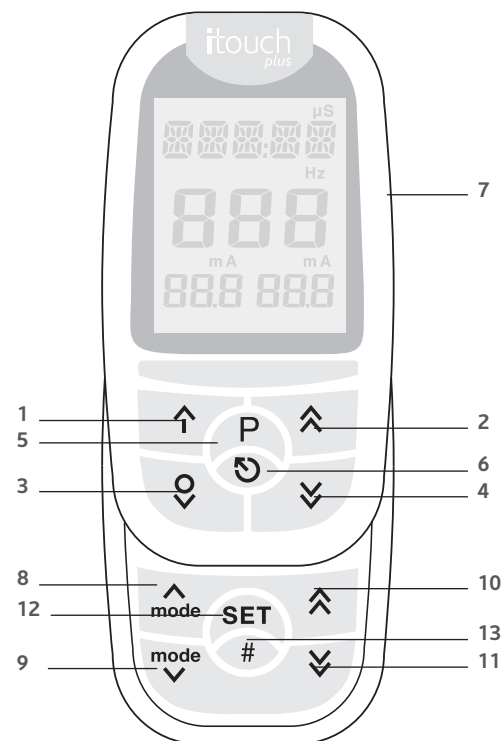
After treatment there maybe a residual tingling (pins and needles) sensation or a numbness of the skin for a few minutes, but this is normal.

10. CONTROLS iTOUCH EASY



1. ON/Ch1 Strength Up
2. Ch2 Strength Up
3. OFF/Ch1 Strength Down
4. Ch2 Strength Down
5. Programme Selector
6. Timer Selector
7. Keypad Lock

10. CONTROLS iTOUCH PLUS



1. ON/Ch1 Strength Up
2. Ch2 Strength Up
3. OFF/Ch1 Strength Down
4. Ch2 Strength Down
5. Programme Selector
6. Timer Selector
7. Keypad Lock
8. Mode Select Up
9. Mode Select Down
10. Range Adjustment Up
11. Range Adjustment Down
12. Set
13. Clock Functions

10. CONTROLS



Button "1" ON / Channel 1 Strength up

To switch unit on: Press and hold down for 3 seconds
To increase intensity: Press and hold down until required intensity is achieved. No sensation will be felt through the pads until the intensity has reached at least the 2.5mA level. Press and release to increase in 0.5mA steps

One Touch Memory Start

When switched on the unit will automatically start in the programme which was being used when it was switched off. The strength increases to about 75% of the intensity that was being used when the unit was switched off. This simplifies start up dramatically.
To stop the increase in strength at any time, press any key once.



Button "2" Channel 2 Strength up

To increase strength: Press and hold down until required strength is achieved. Press and release to increase in 0.5mA steps



Button "3" OFF/Channel 1 Strength down

To lower the strength, press and release to decrease on 2.0mA steps. Press and hold down the button for 3 seconds and the unit will switch off. Alternatively, press the left-hand button until the LCD screen displays 0, any further press will switch the unit off.

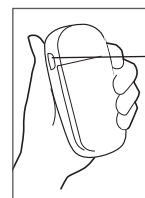


Button "4" Channel 2 Strength down

To decrease strength: Hold down button and strength will decrease continuously in 0.5mA steps



Time remaining



Lock Button

Button "5": Program Selector

The i-touch easy has 8 medically proven programmes, A,B,C,D,E,F,G and H. When the unit is FIRST switched on it will automatically go to Programme A. On future occasions, when switched on it will default to the programme last used. Each time the "P" button is pressed and released, the programme changes, the letter is shown on the LCD in the top left corner, and the strength level reverts back to zero. For choice of Programmes see section 7.

Button "6": Time Selector

The unit when switched on will default to the "Timer OFF" meaning that the unit will run continuously. In order to activate the timer and control the time of the treatment to 15, 30, 45 or 60 minutes press and release the button. Keep pressing the button until the required time is displayed on the screen. During use the unit counts down the minutes set and switches off when it reaches zero. Return to main screen by pressing any other key.

Button "7": Keypad lock

The LOCK BUTTON, on the right side of the unit, can be used to lock all controls except for the intensity down button.

To activate, press and hold down the button for 3 seconds until LOCK is displayed on the screen.

Repeat to deactivate.

10. iTOUCH PLUS ADDITIONAL CONTROLS



Button "8": Mode Select Up
To activate, select programmes "M or N".
Press Mode Up to cycle through FREQ (frequency)
/ PULS (pulse width) / CONST (constant)



Button "9": Mode Select Down
As with Mode Select Up but in reverse



Button "10" Range Adjustment Up
Press to sweep up through range of mode displayed



Button "11" Range Adjustment Down
Press to sweep down through range of mode displayed



Button "12" Set
When the required mode or range has been chosen press the SET
button to save the setting. Once saved the relevant screen display
will stop flashing. Repeat procedure to save other settings

10. iTOUCH PLUS ADDITIONAL CONTROLS (continued)



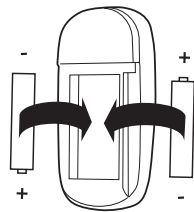
Button "13" Clock/Alarm/Diary
Press this key to enter Time menu for clock, alarm, and
diary functions:

CLOCK: The i-touch has a 24 hour clock.

ALARM: The unit has 3 separate alarms that can be set daily.
They can be used a medication alarms.
To set time and alarms refer to section 11.14.

DIARY: A record will be kept of the use of the units usage in hours
and average strength in mA.

11. USING YOUR I-TOUCH



11.1 Insert batteries

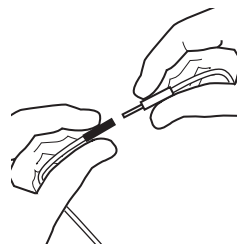
Remove Battery compartment cover by pressing down on the top edge of the cover with three fingers, and then sliding it downwards and off. Ensure that battery polarity matches the diagram in the compartment

Ensure that the ribbon goes behind the batteries to aid future removal.



11.2 Connect Mono Leadwire

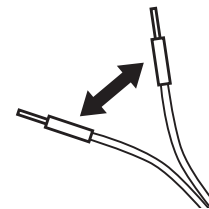
Insert the Mono lead plug into the base of the unit. Please note that it has been designed to only insert one way.



11.3 Attach electrode pads to Mono Lead

At the other end of the Mono Leadwire (not the unit end) the lead wire splits into four pin ends, 2 white and 2 black. Push the pin ends into the pigtail ends of the electrode pads.

11. USING YOUR I-TOUCH (continued)



11.4 Split wire as required

Split the wires apart as required. Each pair of wires is fitted with a toggle in stop the wires being split too far.

11.6 Place electrode pads on skin

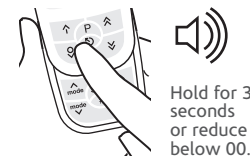
Having attached the pads to the 2 in 1 Leadwire place the pads on the skin. See section 12 on pad positioning. Always check unit is OFF before attaching pads



Hold for 3 seconds

11.7 ON/OFF Sounder

When the unit is switched ON an audible "Beep" will be heard



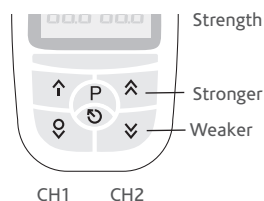
Hold for 3 seconds or reduce below 00.0

When the unit is switched OFF an audible double "Beep" will be heard

NOTE:

Always check unit is OFF before removing pads

11. USING YOUR I-TOUCH (continued)

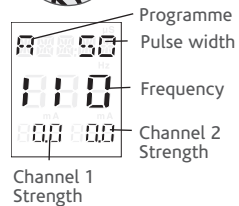


11.8 Strength Adjustment

Strength is displayed in mA

- Press and release for 0.5mA step
- Press and hold down to increase continuously
- After holding for 3 seconds, rate of increase accelerates
- Release and press again for fine adjustment
- Press and release Down arrow to reduce in 2mA steps on Ch1, or press and hold to scroll down on Ch2.

NOTE: After your first use, Easy Start will automatically adjust the strength to about 75% of what you last used. Press any key to stop the increase. If the pads are not attached properly, the display will flash PADS when strength intensity increases beyond 5.0 mA.



11.9 Programme Selection

Press the P button

In Easy, the display cycles through A,B,C,D,E,F,G,H,A etc. In Plus, the display cycles through A,B,C,D,E,F,G,H,M,N,A etc

In each programme, the Pulse Width (μ S) And Frequency (Hz) are shown. For further information on choosing programmes go to section 7.

11. USING YOUR I-TOUCH (continued)



Hold for 3 seconds



11.10 Key Pad Lock

To prevent an accidental change to the settings, the key pad may be locked.

Press the side button and hold for 3 seconds. When LOCK is displayed, only the DOWN in intensity keys will operate. Repeat to remove LOCK



11.11 Treatment Timer

i-Touch has a built-in treatment timer.

Press the timer key until TIMER is displayed. Press again to change settings : - OFF/15/30/45/60/OFF

The display counts down from the time set to zero, then the unit switches OFF

TIMER OFF display means that the unit will run continuously until switched off.

Press any button to return to main display.

12. i-TOUCH PLUS

The i-touch PLUS has been fitted with a sliding front which when slid up reveals a second keypad.

NB: The i-touch EASY does NOT have a sliding front nor a second keypad. Do NOT try to force open an i-touch EASY, as this would negate the guarantee.



To access second keypad simply slide open unit

Push the top layer of your itouch until you hear a click. To close the unit push the top layer in reverse.

12.1 Manual Settings

The Plus offers the option of entering "customised programmes" into the unit and having them stored. This can be beneficial when treating specific pains where the recommended settings are not within the 8 preset programmes or if a specific sensation is preferred.



Programme

Select programme M or N

There are two manual programmes: M and N. Once set both programmes can be saved and altered as required.

12. i-TOUCH PLUS (continued)

Select Mode

Press **mode up**

or

Press **mode down**



Top line of display changes between: FREQ/PULS/CONST
The Mode selected flashes

FREQ adjusts frequency (Hz) from 2 to 150 (Tapping to tingling)

PULS adjusts pulse width (μ S) from 50 to 250 (Higher the setting the more muscle contraction)

CONST/BURST changes between continuous and intermittent stimulation.



Use the up and down buttons to alter the setting

When you have the desired setting, press SET button to save.

If no key is pressed for 6 seconds, display returns to main screen.



12. i-TOUCH PLUS (continued)

12.2 Program Lock

To lock program N or M so that the user cannot alter settings

Press

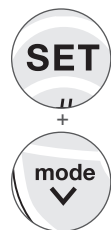


and hold for 3 seconds until LOC M is displayed. After 2 secs, LOC M disappears, but reappears if Mode button is pressed

Repeat to unlock.

To lock program selected so that the user cannot change program

Press



and hold for 3 seconds until LOC P is displayed. After 2 seconds LOC P disappears, but reappears if P button is pressed.

Repeat to unlock

12. i-TOUCH PLUS (continued)

12.3 Clock Functions

Set Time

Press



Cycle through:
CLOCK/ALM1/ALM2/AL3/ MEM/LCD

Select CLOCK.

Clock time is shown as 00 00 at the bottom of display. The first block is flashing for HOURS.

Use



to adjust HOURS,

and



to save



to move
between
hours and
minutes

After you press SET, the second block, MINUTES, starts flashing. Repeat adjustment. If required, use mode up to move between hours and minutes.

NOTE: Each time the batteries are removed, the clock will stop. Normally this will only lose a few seconds. If the unit is left without batteries for longer, you will need to reset the time.

12. i-TOUCH PLUS (continued)

Wait 6 seconds, or press any key on the outer keypad to return to the main screen.

If you do not wish to display the clock, press mode again.
Centre line will display: ON

Use



to select OFF and press SET to save.

12.4 Set Alarms

Press



Cycle through to ALM 1
Default centre line shows OFF.

Use



to select ON, then press



Alarm time is shown as 00 00 at the bottom of display.

The first block is flashing. Adjust and set in the same way as CLOCK.

Set ALM 2 and ALM 3 in the same way.

Press any key on the outer keypad to return to normal display.

12. i-TOUCH PLUS (continued)

12.5 LCD Backlight

The LCD has a backlight which automatically turns on whenever a key is pressed.
To turn this function OFF:-

Press



Cycle through: CLOCK/ALM1/ALM2/AL3/MEM/LCD
Select LCD
Default is ON

Use



to select OFF. Use



to save.

Backlight will turn off 10 seconds after last key press

12. i-TOUCH PLUS (continued)

12.6 Usage Memory

Your i-touch Plus has a memory which records how many hours it has been used in each Program and the average intensity in mA. This does not include periods when the pads are detached and the PADS warning shows.

To display this:-

Press



Cycle through: CLOCK/ALM1/ALM2/AL3/MEM/LCD to MEM

Use



to select the Program number :- A/B/C etc

On the centre line of the display The bottom line of display shows:-



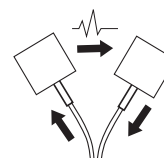
To reset the memory to zero:-

While MEM is showing, press and hold both keys for 3 seconds until bottom line shows 000 000.



Press any key on the outer keypad to return to normal display.

13. POSITIONING THE ELECTRODE PADS



Electrode pads must always be used in pairs, so that the signal can flow in a circuit.

Electrode pads should be placed around where the pain is being felt.

Try different positions until you find the best for you.

The following pictures overleaf show where to place the electrode pads for a range of common complaints.

For those symptoms not illustrated apply the electrode pads around the source of the pain or seek advice from your medical adviser.

13.1 Applying the electrode pads

- Switch off the unit before applying electrode pads.
- Electrode pads should only be used by one person.
- Gel pads need to be tacky. If the gel is allowed to dry out a local inflammation might result (Section 14 covers electrode pads care).
- Clean the skin where you will place the electrode pads with soap and water, then rinse and dry. Electrode pad life will be shortened if applied to dirty or greasy skin.
- Connect the unit lead wires to the short pigtail wires coming from the electrode pads.
- Peel the electrode pads from their protective plastic shield and place on the skin.
- CAUTION Do not pull on the electrode pad pigtail wire as this can break it.
- Keep the plastic shield to store the electrode pads on between use.

13. POSITIONING THE ELECTRODE PADS (continued)



Lower Back



Neck and Shoulder



Sciatica



Shoulder



Knee



Elbow



Ankle



Wrist



Leg

13. POSITIONING THE ELECTRODE PADS (continued)

13.2 PAD WARNING DISPLAY

i-touch monitors the condition of the pads during use and the quality of the connection to the body.

If the pads lose their conductivity or come partly away from the body then the "PADS" alarm will be displayed.

When the pad alarm is triggered, the Comfort Strength Control facility will automatically lower the intensity to a comfortable level. This takes away the possibility of any electrical shocks, however small.

If the alarm is triggered due to the pads coming away partly from the body, then when they are put back the intensity will automatically return to the original level.

The "PADS" alarm does not function on either channel when the intensity level is below 5.0mA.

14. REMOVAL AND STORAGE OF ELECTRODE PADS

- Turn off the unit before removing the electrode pads.
- Do not peel off by pulling on the electrode pad wire as this can break the wire.

Storage

Electrode pads are water-based and may dry out. Between uses they should be stored on the plastic shield in their resealable bag and kept in a cool place out of direct sunlight.

Electrode pads life

The life of an electrode pads varies depending on skin conditions and skin preparation. In the very best circumstances electrode pads might last about 30 applications but they will need to be replaced when they are no longer tacky.

Dried-out electrode pads

If the electrode pad gel becomes dry it is best to dispose of these pads and use a new set. The i-touch uses universal 50x50mm self adhesive pads, normally available in packs of 4.

In case of emergency when no other pads are available, spray the gel with a fine mist of water or apply a single pea-sized drop of water to the gel and spread around with fingertip. Leave the electrode pads for about 10 minutes until they recover some of their tackiness.

Over-wet electrode pads

If by adding too much water, the electrode pad gel becomes too soft and sticky, place the electrode pads in a refrigerator for a few hours, sticky side up.

Very hot weather

In very hot weather the gel on the electrode pads can become too soft. In such cases place the pads, still on their plastic liners and in their bag into a fridge until they return to their normal condition.

15. BATTERY REMOVAL AND REPLACEMENT

The screen will display " BATT" when the batteries the batteries need to be changed.

Battery type

ONLY use either 1.5 AA alkaline batteries or NiMH AA rechargeable batteries. NEVER attempt to recharge an alkaline battery - There is a risk of explosion. DO NOT mix batteries of different types.

When installing new batteries follow instructions as shown in section 11.2. Ensure that the batteries are fitted the right way round, observing + and - signs on the battery and the battery compartment.

Storage

If the unit is unlikely to be used for a long period remove the batteries and store in a dry place away from direct sunlight and not in contact with metal objects.

Disposal

Always dispose of batteries, and the i-touch unit itself, in accordance with local government guidelines. Never put batteries in a fire nor try to disassemble them. Do not attempt to revive alkaline batteries by heating, charging or any other means.

Warning

- Keep batteries out of the reach of small children.
- If battery leakage occurs and comes in contact with the skin or eyes, wash thoroughly with lots of water.
- Seek medical advice immediately if you believe a battery has been swallowed.

16. CLEANING

The case and lead wires can be cleaned by wiping with a damp cloth and a solution of mild soap and water. Wipe dry.
Do not immerse your TENS machine in water.
Do not use any other cleaning solution other than soap and water.

17. TROUBLESHOOTING

If your TENS machine is not working properly please check the following:

BATTERIES:

- i) Have they been fitted correctly?
- ii) Do they need replacing?

PADS:

If PADS signal is flashing:-

- i) Have you applied both electrode pads (two per lead wire) to ensure a complete circuit?
- ii) Are the lead wires properly connected at both ends?

If the above review has failed to resolve your problem, call TensCare or your local dealer (address on back cover) for advice.

18. GUARANTEE

Tenscare provides a warranty to the original purchaser that this product will be free of defects in the material, components and workmanship for a period of 2 years from the date of purchase (invoice date). If a fault develops return the unit to TensCare together with a copy of your invoice and details of the problem. The guarantee does not cover the batteries, electrode pads or mono leadwire.

18. GUARANTEE (continued)

Please note that the Guarantee is invalidated if:

- i) incorrect batteries have been fitted.
- ii) if the unit has been immersed in water, maltreated or tampered with.

19. CONSUMABLES AND SERVICING

Replacement electrode pads, new batteries and lead wires are available from your supplier or distributor (see back cover for contact details), by mail order from TensCare, by telephone using a credit or debit card, or through our website.

Accessories/Spares

The following replacement parts may be ordered from Tenscare.

Electrode pads	Part No E-CM5050
Patient Lead:	Part No L-IT
Optional single channel lead	Part No L-IT-1
Batteries:	Part No B-AA

20. DISPOSAL OF WASTE ELECTRICAL AND ELECTRONIC PRODUCTS (WEEE)

A new law in force from July 2007 will mean that you'll need to dispose of anything electrical or electronic at a collection facility, instead of in your domestic waste. New products are now being marked with the symbol to remind you. Your local council or retailer will be able to tell you where your nearest facility is. The collection facilities will send items for treatment, recovery and recycling, so by using them you'll help to save resources and minimise the effects on the environment.

21. TECHNICAL SPECIFICATION

waveform	Asymmetrical Bi-Phasic
Amplitude (over 500 ohm load)	70mA zero to peak +ve in steps of 0.5mA Constant current over 500-1500 Ohm Constant voltage when PADS signal shows.
Output plug	Fully shielded: touch proof mini USB
Channels	Dual Channel
Batteries	2 x AA Alkaline (Two AA batteries) OR rechargeable NiMH
Weight	90 gms without batteries
Dimensions	110*53*30 mm
Safety Classification	Internal power source. Type BF
Operating Model	Designed for continuous use. No special moisture protection. Ordinary protection
Environmental Specifications:	
Operating:	Temperature range: 0 to 35C Humidity: 20 to 65% RH
Storage:	Temperature range: 0 to 55C Humidity: 10 to 90% RH
TYPE BF EQUIPMENT	Equipment providing a degree of protection against electric shock, with isolated applied part.



This symbol on the unit means " Refer to
Instruction Manual"

NB The electrical specifications are nominal and subject to variation from the listed values due to normal production tolerances

21. TECHNICAL SPECIFICATION (continued)



Serial Number
It is compliant with WEEE
Manufacturer
CE marking with identification number
of Notified body

22. PROGRAMMES

Program	Output	Frequency Hz	Pulse Width μ S
A	Constant	110	50
B	Constant	4	200
C	Burst	2 bursts of 100Hz per sec	
D	Constant	10	200
E	Constant	110	200
F	Modulated SD	110	50-250
G	Modulated	20-110	200
H	Mixed	2Hz/110Hz	200/100 μ S
M	Manual	2-150Hz	50-250 μ S
N	Manual	2-150Hz	50-250 μ S

F - Pulse width modulates from 50 μ S up to 250 μ S and back in 12 seconds, whilst intensity modulates from level set down 70% and back.

G - Frequency modulates from 20Hz -100Hz and back in 12seconds.

H - Alternate 3 seconds at 2Hz, 3 seconds at 110Hz.

23. EMC STATEMENT

The device has been tested and homologated in accordance with EN 60601-1-2 for EMC. This does not guarantee in any way that the device will not be affected by electromagnetic interference. Avoid using the device in high electromagnetic environments.

